



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,910	08/29/2003	Sami Kalajo	875.0124.U1(US)	9575

29683 7590 11/24/2006
HARRINGTON & SMITH, LLP
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
----------	--------------

2617

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/651,910

Applicant(s)

KALAJO ET AL.

Examiner

Naghmeh Mehrpour

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-25**, are rejected under 35 U.S.C. 102(e) as being anticipated by Hadjichristos et al. (US Patent 6,785,521 B2).

Regarding **claims 1, 9, 17, 20-21**, Hadjichristos teaches/method/mobile terminal a power amplifier module operable over a range of output power levels (col lines 41-67, col 2 lines 1-15), comprising;

an output transistor having an input coupled to an input node of the power amplifier module and an output coupled to an output node of the power amplifier module, the power amplifier module (col 1 lines 40-56) further comprising:

circuitry for automatically compensating a load line of the output transistor for impedance variations appearing at the output node, the circuitry comprising:

detection circuitry for generating a first detection signal having a value that is indicative of the current flowing through the output transistor and a second detection

signal having a value that is indicative of the voltage appearing at the output of the output transistor (col 5 lines 3-14), and further comprising:

compensation circuitry for controlling the generation of a plurality of power amplifier bias current and bias voltage signals to have values that are a function of the values of the first and second detection signals, and the current output power level of the power amplifier module (col 6 lines 6-37).

Regarding **claims 2, 10**, Hadjichristos teaches a power amplifier module/method/mobile terminal as in claim 1, further comprising an impedance matching circuit coupled between the output of the output transistor and the output node, the impedance matching circuit presenting a variable impedance that is controlled by an output signal from the compensation circuitry (col 3 lines 55-67, col 4 lines 1-25).

Regarding **claims 3, 11**, Hadjichristos teaches a power amplifier module/method/mobile as in claim 2, where the output signal from the compensation circuitry is generated to have a value that is a function of the value of the first detection signal and the current output power level (col 5 lines 50-67, col 6 lines 1-5).

Regarding **claims 4, 12**, Hadjichristos teaches a power amplifier module/method/mobile as in claim 2, where the output signal from the compensation

circuitry is generated when the current output power level exceeds a predetermined output power level (col 6 lines 1-42).

Regarding **claims 5, 15**, Hadjichristos teaches a power amplifier module/method/mobile as in claim 1, where the compensation circuitry makes a change to at least one of the plurality of power amplifier bias current and bias voltage signals when the current output power level exceeds a predetermined output power level (col 6 lines 1-42).

Regarding **claims 6, 13-14, 18, 22**, Hadjichristos teaches a power amplifier module/method/mobile as in claim 2, where the compensation circuitry makes a change to at least one of the plurality of power amplifier bias current and bias voltage signals when the current output power level exceeds a first predetermined output power level (col 3 lines 35-55); and

where the output signal from the compensation circuitry to the impedance matching circuit is generated when the current output power level exceeds a second predetermined output power level that is greater than the first predetermined output power level (col 4 lines 42-60).

Regarding **claims 7, 15**, Hadjichristos teaches a power amplifier module/method/mobile as in claim 1, where the compensation circuitry controls the generation of the power amplifier bias current signal as a function of a value of the first

Art Unit: 2617

detection signal and a value of a signal that is indicative of the current output power level, and controls the generation of the power amplifier bias voltage signal as a function of a value of the second detection signal and the value of the signal that is indicative of the current output power level (col 5 lines 50-67, col 6 lines 1-42).

Regarding **claims 8, 16, 19, 23-24**, Hadjichristos teaches amplifier module/mobile/method as in claim 1, where the detection circuitry comprises a current mirror in parallel with the output transistor for generating the first detection signal, and a rectifier coupled to the output of the output transistor for generating the second detection signal (col 7 lines 6-24).

Regarding **claims 25**, Hadjichristos teaches a mobile radio communication terminal as in claim 21, where a signal transmitted from said antenna comprises:

a wideband code division, multiple access signal (col 1 lines 9-26).

Response to Arguments

3. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

November 14, 2006

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke, positioned to the right of the date.